

Chronic Wasting Disease

AGFD CWD Test Results:

- [Chronic Wasting Disease Test Results](#)

Additional Information:

- [CWD Alliance](#)
- [USGS National Wildlife Health Center](#)

Chronic wasting disease (CWD) is a fatal neurologic disease affecting free-ranging and captive cervids. Species affected include mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), elk (*Cervus elaphus*), and moose (*Alces alces*). Chronic wasting disease belongs to a group of diseases called transmissible spongiform encephalopathies (TSE). Chronic wasting disease is similar to scrapie in sheep and bovine spongiform encephalopathy (also known as mad cow disease) in cattle, as well as, variant Creutzfeldt-Jakob disease (vCJD) in humans. These disease syndromes are associated with the accumulation of abnormal prions, a cell regulation protein, in the brain of affected animals.

Due to the long incubation period, animals may not have any visible signs of the disease in the early stages of infection. In the later stages of the disease, changes in behavior and appearance occur. Deer and elk infected with CWD during clinical stages may exhibit symptoms including emaciation, lowered head and ears, “blank” facial stare, excessive thirst accompanied by excessive urination, decreased food consumption leading to poor body condition, teeth grinding, excessive salivation, wide-based stance, and incoordination. Affected animals may be seen walking repetitive courses.



Elk exhibiting clinical signs of CWD
Photo Dr. Beth Williams

Surveillance Efforts in Arizona

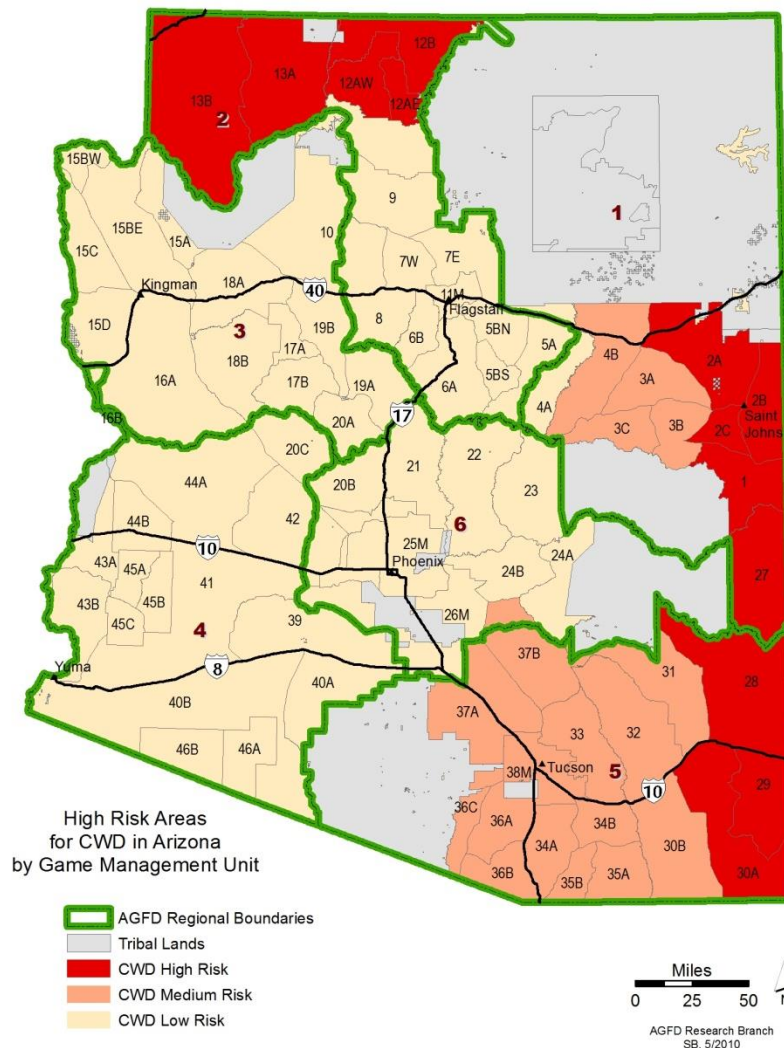
Program Objectives:

- To conduct hunter harvested and targeted surveillance of both deer and elk throughout the state of Arizona.
- To increase surveillance efforts in areas bordering CWD-positive states.

Surveillance in Arizona has thus far shown that CWD is not present in our deer or elk populations. The Arizona Game and Fish Department has implemented steps to reduce the potential for this disease so that it doesn't establish itself in Arizona. Extra efforts are being made to focus on areas bordering CWD-positive states. Protocols have been established should the disease find its way across our borders.

Arizona has been divided into risk areas based on proximity to states where CWD has been found in wild cervid populations. Game Management Units (GMUs) have been grouped based on their locations and categorized as high risk, medium risk, and low risk (see map below). Within each risk area, rough population estimates of cervids (mule deer, white-tailed deer, and elk obtained from the Department's

survey data) were used in an epidemiological model to calculate a desired sample size that would allow for the detection of a 1% prevalence of CWD at a 95% confidence interval.



The Department began conducting CWD surveillance in 1998 and has since collected over 19,000 samples. Each year samples are collected from hunter harvested and targeted deer and elk throughout the state. Hunter harvested samples are typically collected by means of taxidermists and meat processor participation, as well as, through check stations and regional drop-offs.

Hunters can assist by bringing in the head of their recently harvested deer or elk to any Game and Fish Department office between the hours of 8 a.m. and 5 p.m., Monday through Friday. Place the head in a heavy plastic garbage bag for delivery, and keep it cool and out of the sun. If the weather is warm, it is best to bring in the head within 1 day of harvest and keep it on ice in a cooler before delivery.

When submitting heads for sampling, please provide accurate, up-to-date hunter information (name and phone number) as well as hunt information (hunt#, permit #, game management unit harvested in, state, and hunt license) as this information is crucial should a positive CWD sample occur.

Precautions

In order for Arizona to maintain its CWD-free status, hunters are advised to take certain precautions when hunting in state or out of state. The Department is concerned that CWD might be inadvertently brought into our state through the transport of infected animal tissues. The Arizona Game and Fish Commission Rule R12-4-305 allows an individual to possess, transport, or import only the following portions of cervids lawfully taken in another state or country:

- Boneless portions of meat, or meat that has been cut and packaged;
- Clean hides and capes with no skull or soft tissue attached;
- Antlers, clean skull plates or skulls with antlers attached with no meat or soft tissue remaining;
- Finished taxidermy mounts or products; and
- Upper canine teeth with no meat or tissue attached.

Do not bring the brain, intact skull, or spinal column of deer or elk harvested in another state back into Arizona.

If you intend to hunt out of state, contact the wildlife agency in the area you intend to hunt. Many states have regulations on carcass movement.

The following precautions should be taken when pursuing or handling deer or elk:

- Do not shoot, handle or consume any animal that is acting abnormally or appears to be sick. Contact the Arizona Game and Fish Department at 1-800-352-0700 if you see or harvest an animal that appears sick.
- Wear latex or rubber gloves when field dressing your deer or elk.

If hunting in a CWD positive state:

- Bone out the meat from your animal. Don't saw through bone, and avoid cutting through the brain or spinal cord (backbone).
- Minimize the handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals. (Normal field dressing coupled with boning out a carcass will remove most, if not all, of these body parts. Cutting away all fatty tissue will remove remaining lymph nodes.)
- Avoid consuming the meat from any animal that tests positive for the disease.

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